

Designed & Manufactured By :

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Three Phase Synchronous Generator/Alternator Lab:

Synchronous Gererators **also called Alternators** are the primary source of all electrical energy. Commonly used to convert the mechanical power output of steam turbines, gas turbines, reciprocating engines, hydro turbines into electrical power for the grid.
The system includes a Synchronous Generator coupled with DC Machine(acts as a Prime Mover) mounted on heavy duty 'C' Chanel base Structure and anti-vibration pads. The Control Panel complete with internal wiring and accessories like digital meters, suitable starters, switches, fuses, indiacting lamps and connectors. The unique demonstratative MMIC Diagram helps students to do connections and experiments themselves.

Powder Coated Panel Structure, fabricated from high quality 16/18 SWG M S Sheet with in-built storage facility. Cost-Effective Table Top Panel, Customized & Tailor made design is also available as per specific requirement of the Customer.

The system has scope to learn Open Circuit Characteristics & Short Circuit Characteristics of Synchronous Generator. Measurement and calculate the positive, negative & zero sequence impedance, Direct & Quadrature axis reactance of Three Phase Synchronous Generator.



Technical Specifications :

Synchronous Machine : Acts as a Generator
Type : Salient Pole type / Nonsalient Pole type
Ratings : 3 HP to 5 HP
Base Voltage : Three Phase AC 415V
Excitation : 0 - 180V DC Variable
Speed : 1500 RPM(or as Specified)
Insulation Class : B / F

DC Machine : Acts as a Prime Mover
Type : Shunt/Series/Compound
Ratings : 3 HP to 5 HP
Base Voltage : 220V/380V/440V
Speed : 1500 RPM(or as Specified)
Insulation Class : B / F